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ABSTRACT

The purpose of this study was to examine the effects of verbal experience on children's creative expression and to develop more precise means for interpreting and evaluating children's art. Two questions were of interest: (1) Does the experimental approach described here enable children to resist forces tending to cause stereotyped artistic expression? and (2) Does verbal stimulation help children express artistically concepts of greater complexity? Subjects were eighty-five 5- and 6-year-olds who were divided into an experimental and a control group. Each group had art instruction once a week for a year; the control group was provided with a humanistic discussion-based art program and the experimental group was exposed to an intense verbal experience specifically designed to encourage the child to state his egocentric thought as verbal symbols. Results suggested that children could learn to resist forces tending toward stereotyped art expression. Other results, relative to expression of concepts, were not statistically significant. Included with the study is a detailed discussion relating creative expression to the levels of child development. An appendix describes the program used with the control group, titled the Humanistic Approach to Art Education in the Elementary School. (MS)

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WE LIKE TO MAKE PICTURES:
MAINTAINING CREATIVE EXPRESSION
IN PRIMARY LEVEL PUPILS

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PREFACE

The current focus on a return to "basics" applies the term in reference to the three R's: reading, 'riting, and 'rithmetic. Certainly, attainment of at least a functional level of literacy in these areas is essential to economic survival in our time. Proficiency at higher levels, however, must be achieved by a major portion of the population to insure survival of our economic system and democratic institutions. There can be little disagreement that this is indeed true.

Disagreement does arise, however, in the limitations imposed upon the term "basic" as applying simply to the three R's. To do so ignores a tremendous body of data yielded over the years by research in sociology, psychology, neurology, and education. Such data indicate dynamics operating within ourselves which exert a greater influence on us as learners than the level of competency we demonstrate as we read, write, and do arithmetic. "Basic" are the effects of how we perceive, conceptualize, and create, how we feel about ourselves as learners and as people. To effect these basics in positive ways is the process of education, and, hence, contributory to all learning, including reading, writing, and arithmetic.

The subjects involved in the study described in this monograph were young children--five and six years old. The treatment stimulated perpetuation of their innate originality, spontaneity, and creativity--". . . a state of mind . . ." according to Don Fabun, ". . . most widely expressed by very young children because their confrontation with their environment is constantly made up of original discoveries and inventions" (4).

Is nurture of such qualities important as a goal in the education of our people? Don Dinkmeyer is one of many who so attest, emphasizing that the teacher is the key to such accomplishment.

If the child is to become open, honest, involved, altruistic, and committed to democratic values, he must have teachers who are models for this approach to living, and who provide him with

opportunities to be involved, free from anxiety, perceptive, imaginative, creative, and spontaneous. These qualities, acquired in the group, are personally experienced and valued and hence internalized in the person and in the teaching process. Only the fully functioning person can meet the current challenges in education. (2, p. 619)

A precisely designed approach to art served as the channel through which creativeness in this study was expressed. The appropriateness of art as a channel is lauded by Maslow.

. . . If we hope for our children that they will become full human beings, and that they will move toward actualizing the potentialities that they have, then, as nearly as I can make out, the only kind of education in existence today that has any faint inkling of such goals is art education. So I am thinking of education through art not because it turns out pictures but because I think it may be possible that, clearly understood, it may become the paradigm for all other education. That is, instead of being regarded as the frill, the expendable kind of thing which it now is, if we take it seriously enough and work at it hard enough and if it turns out to be what some of us suspect it can be, then we may one day teach arithmetic and reading and writing on this paradigm. So far as I am concerned, I am talking about all education. This is why I am interested in education through art - simply because it seems to be good education in potential. (8, pp. 57-58)

This monograph reports the effects of an art program designed to nurture creativity. An effort has been made to describe the treatment with such clarity that the classroom teacher will be able to replicate the approach in art education as well as in other areas of study. Examples of children's art are presented and discussed in order to aid teachers in their interpretation of the art work of those enrolled in their own classrooms.

2

"It has been said that the creative person is essentially a perpetual child. The tragedy is that most of us grow up" (4). It is our hope that the information contained in this monograph will aid teachers in their efforts to perpetuate the originality, imagination, and spontaneity with which children enter our schools. The reward will be in supporting growth toward self-actualized people able to resist "social pressures to conform and the repetition of experience" (4) through which the sense of wonder is lost and creativeness stifled in becoming "trapped in a concrete mold not of their own making" (4).

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CONTENTS

	Page
PREFACE	ii
MAINTAINING CREATIVE EXPRESSION IN PRIMARY LEVEL PUPILS	1
THE STUDY	4
DID IT WORK?	5
WHY THIS APPROACH?	11
HOW WAS IT DONE?	25
The Pupils	25
The Staff	25
The Procedures	25
WHAT DO THE DATA SHOW?	40
Collection of Data	40
Preparation of Data	40
Analysis of Data	41
Maturity Levels	49
Maturity Level Drawings	50
APPENDIX: THE HUMANISTIC APPROACH TO ART EDUCATION IN THE ELEMENTARY SCHOOL	62
REFERENCES	68
BIBLIOGRAPHY	70
TABLE 1	57
TABLE 2	58
TABLE 3	60
Figure 1	12
Figure 2	14

MAINTAINING CREATIVE EXPRESSION IN PRIMARY LEVEL PUPILS

Young children are naturally creative, expressing themselves in ways that are original, imaginative, and spontaneous. At the same time, they have a propensity for imitation, possibly as a consequence of a characteristically human need for achieving and maintaining order, security, and equilibrium. Robert Frost expressed it--"Let chaos storm . . . let cloud shapes swarm . . . I wait for form."

Certainly, form is essential to the creative act and observable in the work of young children. Yet, adult anxiety too frequently "leads students directly and constantly to the final stages of execution and expression, with too little attention to the preliminary phases of creative thinking" (7, p. 72). Thus, the child comes increasingly to view the world in "stereotypes" and to express himself with decreasing spontaneity.

Coloring books, dot-to-dot, and paint-by-numbers are art stereotypes in their most blatant form. Holidays bring with them many forms of stereotypes: jack-o-lanterns with triangle-shaped eyes, black cats with arched backs, hand-traced turkeys, fold-and-cut Christmas trees, trace-a-bunny for Easter (with visible evidence of 30 stereotypes plastered in the classroom windows). Often, these stereotypes appear in children's art when they are drawing about their own experiences (see Drawings 1a and 1b).

Children's drawings often contain stereotypes that are generalized forms with little attention paid to detail. These "warmed over images" (see Drawing 2) include lollipop trees, square houses with triangle roofs and chimneys, repetition of simplified flowers, and many other images which do not reflect the child's innate ability to communicate his experiences in original, imaginative, and spontaneous ways. There is a need to discover means for preserving these creative qualities in young children and, at the same time, to help them acquire the skills in using art media creatively for self-expression.

Drawing 1a



Drawing 1b



Drawing 2



THE STUDY

The central purpose of this study was to examine the effects of verbal experiences, directed toward maintaining creative expression, of 5- and 6-year-old children. A concomitant purpose was to develop more precise means for interpreting their art as well as for evaluating the growth of their expression through art.

A number of educators have suggested a need for research dealing with the effects of alternative curriculum approaches that would lead to increased understanding of children's art (3, 14, 1). Through the years a variety of approaches have been designed and put into practice but have not been adequately evaluated.

Art learning has been considered to be visual, affective, and too qualitative to be measured objectively. Consequently, art teaching continues with only partial knowledge of its effectiveness. There is hardly any evidence to show the relative effects of different programs on students. (14)

Specific objectives for the experimental program were to (a) stimulate subjects to express concepts through their art that are more complex than those produced without the verbal experience prior to art activities and (b) encourage them to communicate orally and through art experiences in ways that less stereotyped are more original, imaginative, and spontaneous.

Throughout the academic year, treatment for the experimental group encouraged integration of emotional, intellectual, perceptual, and aesthetic experiences prior to each art "lesson" as described by Lowenfeld* in his book Creative and Mental Growth (7). Integration was encouraged through use of questions designed to elicit responses from children which focused on their perceptions, experiences, and feelings, and, ultimately, expressed through art media.

*Victor Lowenfeld's book described the various stages of child development and the relationship between the developmental levels and meaningful art experiences. It is recognized as a classic in the field of art education.

DID IT WORK?

The study sought answers to two major questions:

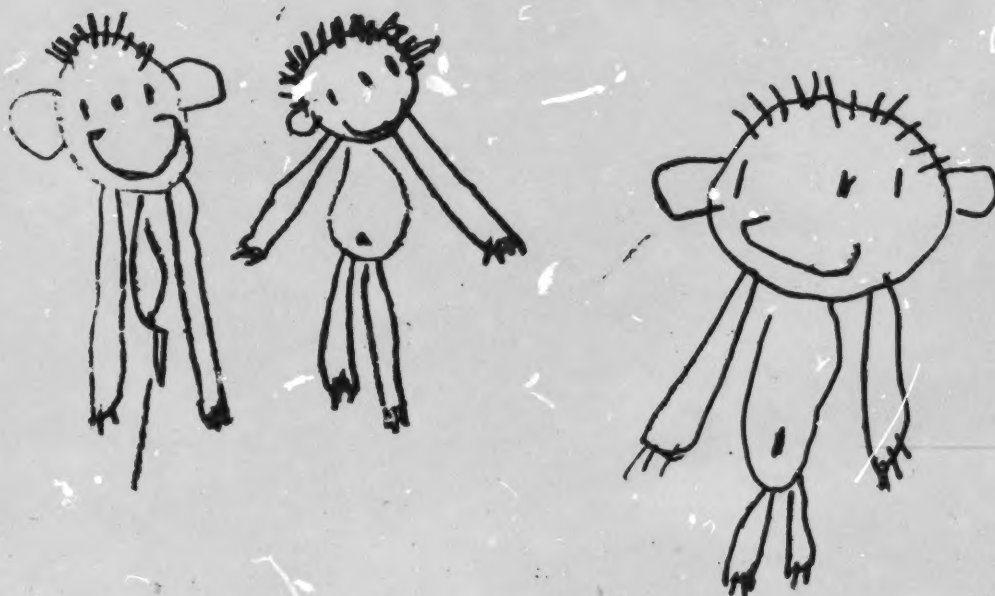
1. Does the experimental approach, described in this monograph, enable children to resist forces which tend to cause expression through art to become stereotyped?
2. Does the verbal stimulation used in this approach help children express concepts through their art that are more complex than those produced when there is no such verbal experience?

In reference to the first question, the findings of this study indicate that the approach described in the following pages does significantly inhibit the development of stereotyped expression through art.

Drawings 3a and 3b serve as a visual example of increased originality as determined by a team of five raters. The highest possible score was 35. It is interesting to note that the subject matter of the drawings, the three members of the child's family, remained the same.

Relative to the second question three components were designated for analysis: the primary figure (Concept #1), the background (Concept #2), and the total of Concepts #1 and #2 (Concept #3). Although the data were not statistically significant, relative to expression of concepts, only the experimental group scores for Concept #1 (number of concepts in the main object) improved. While there was little or no difference between Concept #1, pre- and posttest scores for kindergarten children in either group and first graders in the control group, considerable gains were made by the first graders in the experimental group. Regarding Concept #3, the experimental group showed sizeable mean gains from pretesting to posttesting while the control group exhibited near zero and negative gains.

Drawing 3a

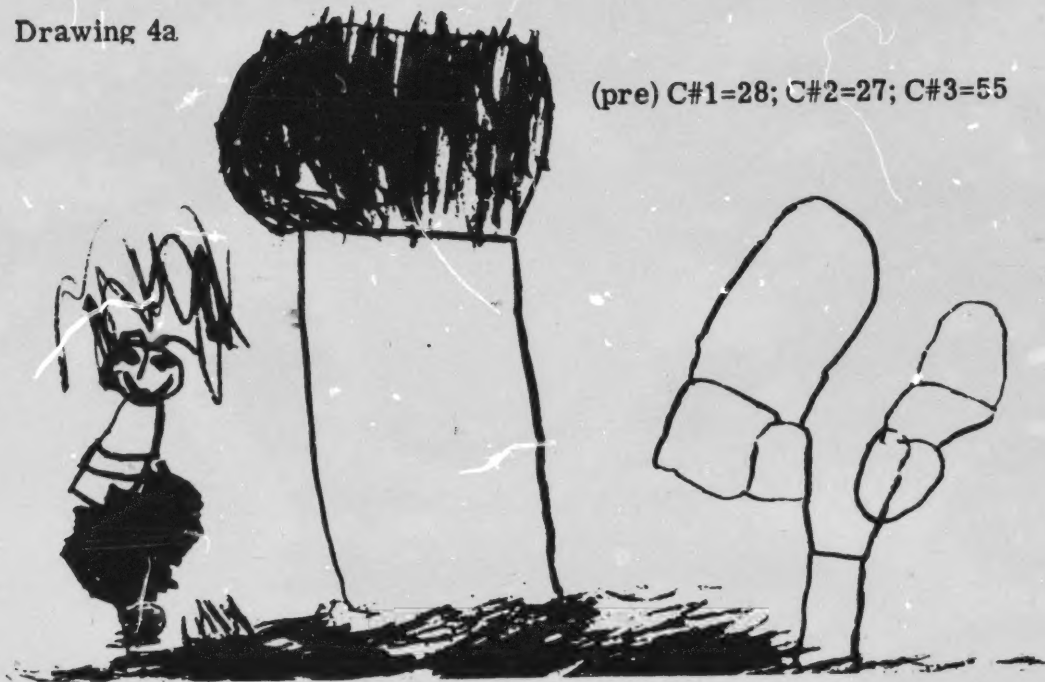


Drawing 3b



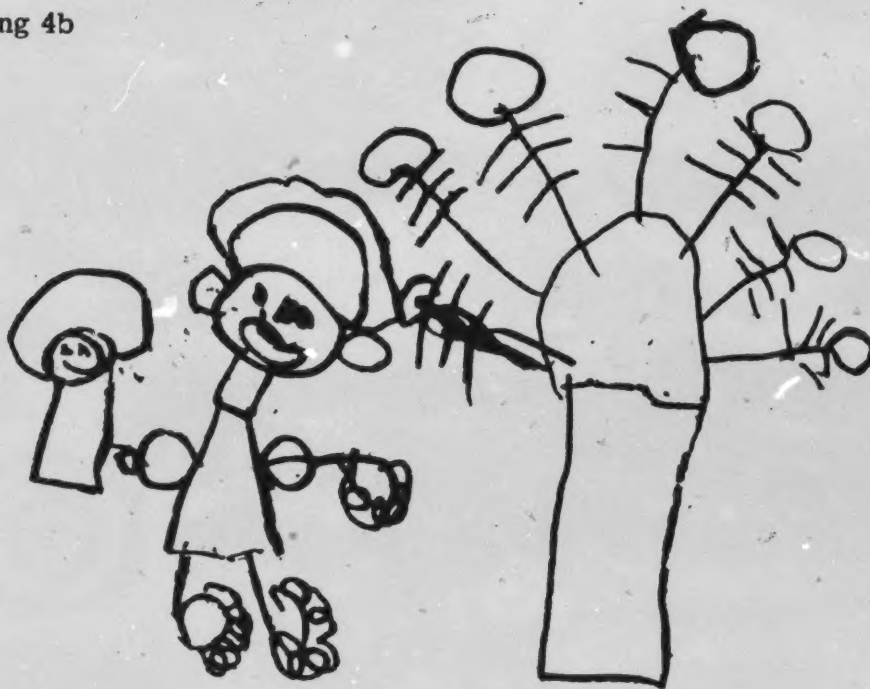
Drawing 4a

(pre) C#1=28; C#2=27; C#3=55



Drawings show an increase in Concept #1 (primary figure) only.

Drawing 4b



(post) C#1=55; C#2=19; C#3=75

Pretest 5a (stereotype - 8) versus posttest 5b (original - 31) shows considerable increase in both concept development and originality.



Drawing 5a

(pre) C#1=44; C#2=13; C#3=57



Drawing 5b

(post) C#1=73; C#2=52; C#3=125

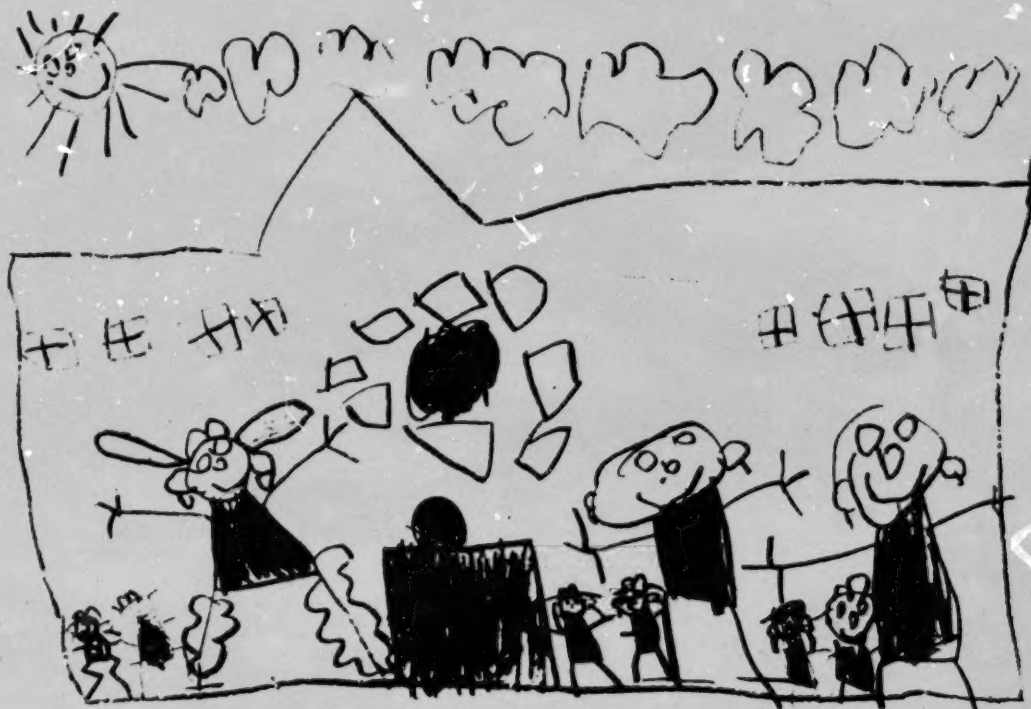
Drawings 6a (pre 15) and 6b (post 35) also show considerable growth in both concept development and increased originality.

Drawing 6a



(pre) C#1=34; C#2=0; C#3=34

Drawing 6b



(post) C#1=82; C#2=47; C#3=129

Details concerning instruments, testing procedures, procedures used in analyzing data and findings are presented in response to the question "What Do the Data Show?" The complete discussion begins on page 40.

WHY THIS APPROACH?

Prior to the 1970's, art education tended to focus "away from the learner and toward a discipline of art" (9, p. 8). The programs that were developed based their curriculum content on the disciplines of art history and art criticism, with considerable concern for the art product (5). Harold McWhinnie contends that a number of these curricula have become excessively dominated by subject matter content and are out of step with the educational and social needs of the 1970's.

Today, educators are looking toward the individual and his experience as the source of teaching content. Attempts are being made to personalize education in all subject areas and on all levels. It is with this re-emphasis on the individual and on child-centered programs that McWhinnie stresses the need to reevaluate the work of Victor Lowenfeld in a new light, seeking new meaning. Lowenfeld emphasizes the significance of the child's self-identification through his art experiences. His approach suggests that in order for self-identification to occur and for the art experience to be meaningful, a total integration of emotional, intellectual, perceptual, and aesthetic experiences must occur. In general, "The child-centered art program concentrates on the needs of children for mental growth and creative development" (5, p. 15).

In order to clarify, at least to as high degree as possible, the relationship between the child and his art, it is necessary to increase understanding of the child: the way he thinks, the way he speaks, and the way in which he reacts with his environment. To this end Piaget's theories of child development are most helpful.

Figure 1 presents an overview of the "Stages of Development" as these relate to the "Levels of Thought Process Development". An examination of the total range will assist in gaining a perspective. In the extremes development moves from sensorimotor (beginning at birth) to formal operations (covering ages 11-15), paralleled by the development of thought processes ranging from that which is autistic to that which is intelligent. Many levels of communication lie between autism and intelligence. Communication develops from levels dependent upon internalized images (autism) to those that are increasingly dependent upon the use of concepts as expressed through language (11). By definition, autism and the sensorimotor stages are at corresponding ends of the continuum and intelligence and formal operations are at the other end. Correspondingly, then, the preoperational stage of development corresponds to egocentric thought.

Figure 1

Stages of Cognitive Development:

<u>Sensorimotor</u>	<u>Preoperational</u>	<u>Concrete Operations</u>	<u>Formal Operations</u>
Levels of Thought:			
Autistic thought	Egocentric thought	Pre-Intelligent thought	Intelligent thought
Noncommunicative	Communicative, not aiming to be understood	Communicative, aiming to be understood	Communicative
Ideosyncratic	Ideosyncratic	Semi-Socialized	Socialized
Nonlogical	Intuitive logic	Transductional logic	Logical
Symbols, images	Imagination	Pre-Concepts	Concepts

There is considerable carry-over from the autistic thought of the sensorimotor stage to the preoperational stage (see Figure 2). Although movement from one stage into another is recognizable in the behavior of children within an approximate age range, expression of that which is original, imaginative, and spontaneous seems to derive from within the autistic level. Hence, it seems logical to assume that for creativity to continue to function, indeed, to increase, throughout life, it is essential to keep in touch with internalized schemas of autism.

Pertinent, then, is a close study of autistic thought which Piaget defines as follows:

Autistic thought is subconscious, which means that the aims it pursues and the problems it tries to solve are not present in consciousness; it is not adapted to reality, but creates for itself a dream world of imagination; it tends, not to establish truths, but so to satisfy desires, and it remains strictly individual and incommunicable as such by means of language. On the contrary, it works chiefly by images, and in order to express itself, has recourse to indirect methods, evoking by means of symbols and myths the feeling by which it is led. (11, p. 63)

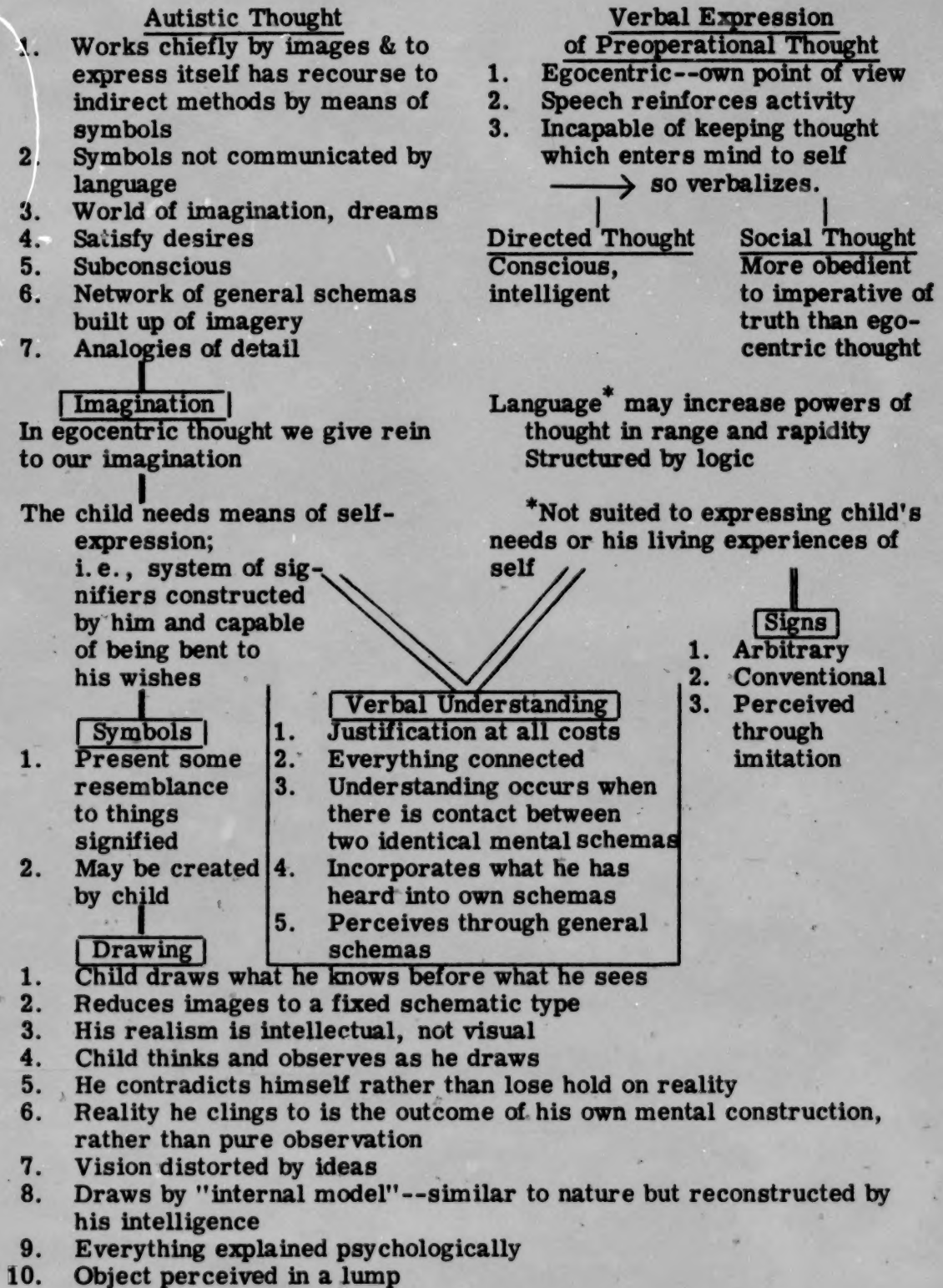
In other words, autistic thought is nonconscious thought and does not deal with reality. Instead it indulges in dream-like imagination and is expressed through uniquely personal symbols and images.

Further, autistic thought "obeys a whole system of special laws" which Piaget classifies as "the laws of symbolism" and "the laws of immediate satisfaction" (11, p. 63). The expression of these systems, because of their very nature, will remain individual.

Instead of a social system of expression (language), autistic thought requires a system of personal symbols that represent internal images. This internal system evolves through a symbol system that the child has created within himself. Although the symbols are highly personal, imaginative, and often dream-like, they do at times resemble the things that they signify (12).

The creation of a system of personal symbols is of great importance to a young child. Frequently, children must adapt themselves to a social world, whose interests and rules do not seem to logically apply, and adapt to a physical world which they do not fully understand. These adaptations do not satisfy personal desires and feelings of the child or meet his intellectual needs. Consequently, the

Figure 2



child must engage in an activity which allows him to express his needs, his desires, and his real and imaginary experiences in a strictly individual way (12). For satisfaction, he requires a means of self-expression which allows him control over the symbols that are to be used. Language alone, as a means of expression, is not adequate to meet this need because language is not a personal symbol. It is not invented by the child but "transmitted to him in ready-made, compulsory, and collective forms" (12, p. 58).

One way in which the child can express himself satisfactorily without having to adapt to reality is through symbolic play.

Symbolic play frequently deals with unconscious conflicts; sexual interests, defense against anxiety, phobias, aggression or identification with aggressors, withdrawal from fear of risk or competition, etc. Here the symbolism of play resembles the symbolism of the dream. (12, p. 62)

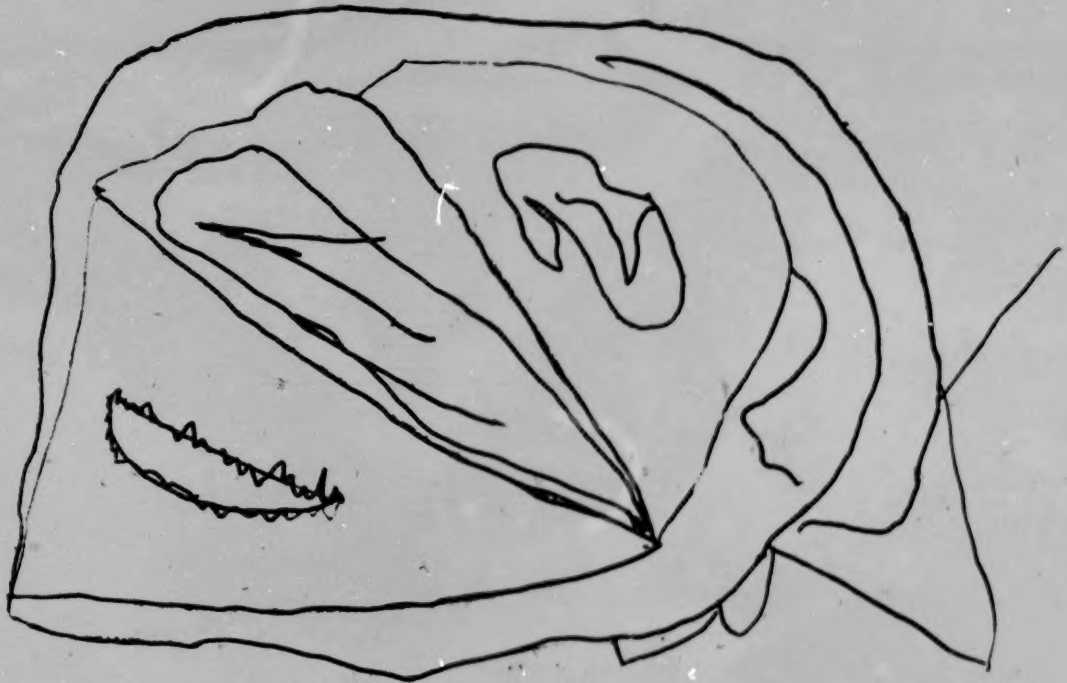
In symbolic play the child creates a form of "language" and symbols that vary according to his need. The child creates symbols to express the things in his life that cannot be expressed through language alone. Through symbolic language he is free to devise symbols that are individual; symbols that satisfy his needs and desires (12). Hence, the child "becomes" the object he is representing. The child "becomes" the hurt animal or the kite in the sky.

If the characteristics of symbolic play are compared to the characteristics of autistic thought, the similarities between the two become apparent. Both may deal with problems that are not present in the conscious; both reflect the symbols and images of a dream world; both strive toward the satisfaction of desires and expression of needs. The expression of problems, dreams, and desires in both symbolic play and autistic thought are, through a personal symbol system, defined and controlled by the child.

The drawings of the child are influenced by autistic thought in many of the same ways as is his symbolic play. Piaget uses Loquet's phrase "fortuitous realism" to describe the earliest stage of drawing. This stage begins sometime after a child is two years of age. "Fortuitous realism" refers to the "realism of the scribble whose meaning is discovered in the act of making it" (12, p. 64). The scribble has little relation to the reality of the world the child sees. Instead, the reality is in the act of scribbling; in the satisfaction received from having fulfilled the desire to fill the paper with lines, shapes, and colors. The images formed are highly individual, having meaning only

for the child who is drawing. Since this is the earliest stage of drawing, it is most closely related to the sensorimotor stage of development, and, in turn, to autistic thought. There is no attempt on the part of the child to communicate ideas, only an attempt to satisfy desires and create personal images. Lowenfeld suggests that the "only source of these scribbles is the child himself" (7, p. 94).

Drawing 7

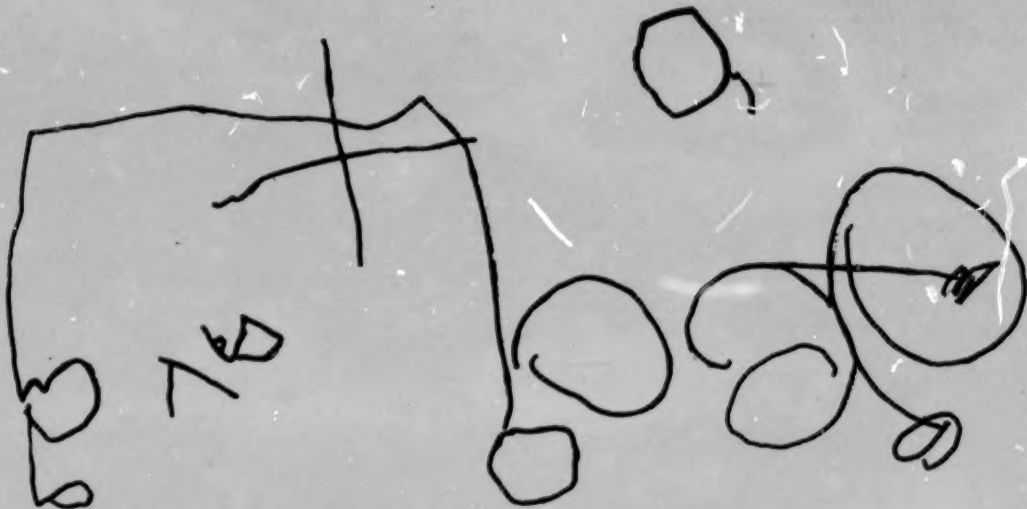


Drawing by boy early in kindergarten year

The next stage that children go through in drawing carries Loquet's term "failed realism" (12, p. 64). This term implies that the elements of a drawing are juxtaposed instead of forming a visually recognizable whole. In some cases, symbols begin to resemble things they signify, but, the images remain personal (see Drawings 8 and 9).

Drawing 8

"I live in a Mobile Home"



Drawing by same child as Drawings 3 and 4,
late in kindergarten year.

Drawing 9

"I am a Football Player"



Drawing by same child as Drawings 3 and 4,
end of kindergarten year.

This stage of drawing is a link between scribbling and representational drawing. Both drawings 10 and 11 indicate that the child is in the process of developing a personal symbol or image system that does not construct a visual reality. Like the previous stage, it is also influenced by artistic thought, clearly reflected in the dream-like quality and juxtaposed images in Drawing 11.



Drawing 10

Drawing 11



The preoperational child is often at the stage of "intellectual realism", where the drawing has evolved beyond the primitive scribbles but is not yet concerned with visual perspective (see Drawing 12). This stage is the beginning of representational drawing; representational in that it depicts the child's concept of reality as opposed to visual reality. One reason for the lack of visual reality is that the child's vision is distorted by his ideas (11). His reality is derived from his own mental construction rather than from pure observation. As stated previously, his egocentric thought process and his imagination are very much influenced by his autistic thought; thought that manifests itself through personal images created by a dream world of imagination (see Drawing 13).

As the source and determiner of the child's schemas or organized sequences of actions, autistic thought exerts major influence upon egocentric, preoperational thought, which characterizes nearly fifty percent of the preoperational child's spontaneous speech (11). While a child of around the age of six is playing, drawing, or engaged in similar activities, he is continually announcing what he is doing: "I am building a house." . . . "I am coloring the dog."

Although he talks almost incessantly to his neighbours, he rarely places himself at their point of view. He speaks to them for the most part as if he were alone, and as if he were thinking aloud. (11, p. 60)

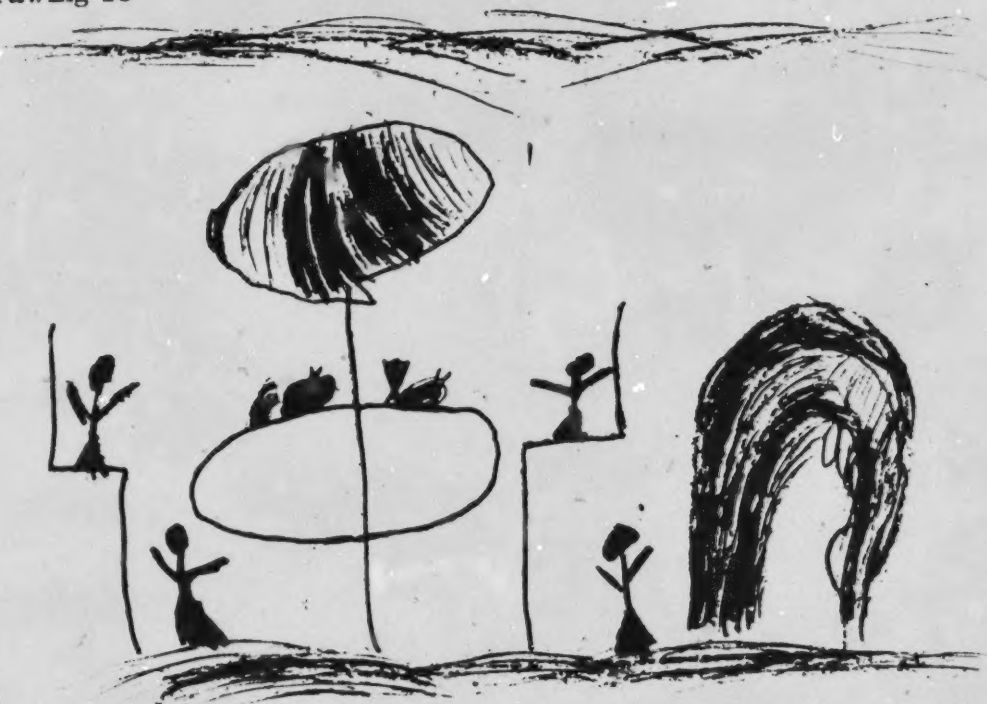
His speech seems to be reinforcing his activities as he engages in a monologue to accompany his actions as he assimilates new objects and new experiences into existing schemas. He has not reached a point in the socialization process which requires him to keep his thoughts to himself. When with a group of other children, a social form of egocentric language takes place, the collective monologue. Each child acts as if he were alone--not waiting for answers or allowing companions to speak without being interrupted (11).

While speaking, the child rarely asks himself if he has been understood because his purpose is not to communicate his thoughts to others. His purpose is simply to talk to himself for his own gratification: gratification of his need to assimilate experience into existing schemas or to accommodate experiences through modifying the old or constructing new schemas or patterns for organizing in-put. Hence, he feels no need to express himself clearly or to think about his ideas from another person's viewpoint. Perspective from one point of view arises from the child's perception of himself as the center of the universe; that the universe was created for him (11).

Drawing 12



Drawing 13



At this preoperational, egocentric level the child's conversation has two distinct characteristics, "acted" and spoken (11, p. 62). In the first case, "acted" conversation, the child is aided by any material object with which he is playing or working. When interacting with another child or an adult, the understanding between them does not depend solely upon verbal communication. Rather, he mimics, demonstrates, gestures, and in other physical ways uses the object to make his ideas more easily understood. As a result, "all the language that is bound up with action, with handicraft, and especially with play, will tend to become more socialized" (11, p. 62). In situations in which there is a material object to aid conversation, children understand each other quite well. The object seems to add a focus and a common experience to which both children can relate; that is "language in movement is the real social language of the child" (11, p. 94).

In the second case, that consisting solely of the spoken word, the child must attempt to express his thoughts without the aid of material objects. Consequently, he relies heavily upon his intellectual process: the process in which language establishes "a bond between thoughts and words to make an increasing use of concepts" (11, p. 64). However, the child's thought process is not yet at a high level of abstraction or conceptualization. Instead, his thinking is intuitive, imaginative, and ideosyncratic. His thoughts are of himself and he speaks from his own point of view, assuming that everyone will understand.

His spoken conversation is far more influenced by his egocentric thought processes than is his acted conversation. Without the aid of material objects, the child is free to allow his mind to wander and engage his ideosyncratic thought. The accompanying speech serves to reinforce individual activity rather than to socialize behavior or communicate ideas (11).

Although the child's intellectual processes will remain predominantly egocentric until he is approximately six or seven years old, these early thought processes are the beginning of what Piaget terms "directed" or "intelligent" thought in contrast to "undirected" or "autistic" thought (11, p. 63). Piaget defines the term "directed thought" as follows:

Directed thought is conscious, i. e., it pursues an aim which is present to the mind of the thinker; it is intelligent, which means that it is adapted to reality and tries to influence it; it admits of being true or false (empirically or logically true), and it can be communicated by language. (11, p. 63)

However, while a young child's thought can be classified as conscious and at times is communicated by language, the thought process does not always perceive reality or true logic. That is to say the egocentric logic of directed thought is more intuitive than deductive, and judgments of value have far more influence on egocentric thought than on communicable thought (11).

The child's perception develops from the whole to the parts (11). As a result, the child perceives by means of general schemas which represent the whole, creating implications from the general schemas without stopping to analyze detail. The child hears remarks or sees an object and incorporates the experience into his own schemas, assimilating to his own point of view as the center of his own internal "universe" (11). In other words, the child, believing that he understands everything, reasons as a whole, accepts the whole, and incorporates it into his own schemas without analyzing the detail in what he has experienced. This process leaves the child with general impressions which are freely associated, or juxtaposed, one with another.

Because in his preoperational thought the child perceives his experience of the world as general schemas, he exhibits general schemas as a representation of his experience when drawing. His drawing presents similarities to nature reconstructed by his intelligence. The child's drawings may be lacking in detail but, at the same time, include a combination of ideas and images which adults view as unrelated, unrealistic, and perhaps even distorted.

Although Piaget's theories are valuable for understanding the child, and therefore his art, the stages of development that he outlines do not always parallel the stages of autistic development. Piaget states that ". . . it is much more difficult to establish regular stages of development in the case of autistic tendencies than it is in the other mental functions" (10, p. 22).

Nevertheless, insight into the manifestations of perceptual and conceptual development derived from the findings provides concrete direction for planning, implementing, and evaluating the art curriculum for the early school years. First, the child's preoperational thought is egocentric in nature and intimately related to autistic thought. Second, the child's highly personal symbol system is an important means of self-expression because it is one of the few means within his command through which his internal images and perceptions of the world may be communicated. Third, and possibly the most important consideration, is the fact that the stimulus in the relationship between autistic development and other mental functions is affective as well as cognitive. According to Piaget, "The facts show two parallel structures, the affective and the cognitive which are complementary, but without one being the cause of the other" (13, p. 9).

It follows, then, that the art curriculum must be child-centered and employ an approach which (a) provides the most promising opportunities for releasing autistic and preoperational thought and (b) stimulates the child to express his living experience from within himself. Such an approach suggests that in order for self-identification to occur, and for the art experience to be meaningful, a total integration of emotional, intellectual, perceptual, and aesthetic experiences must occur prior to an art activity (7).

One way in which such integration may be facilitated is through verbalization between the teacher and the children. The nature of the verbalization must be such that each child is encouraged to engage in egocentric thought, thus clarifying his own feelings, perceptions, and concepts relating to the topic of the anticipated art activity.

In addition to stimulating egocentric thought, the inclusion of verbal interaction prior to the art "lesson" should allow for some free association, since the purpose of the experience is, in part, to break through socialized thought to autistic thought. Interaction should also be designed to increase the child's perception of detail. This may be accomplished by including verbalization which breaks the whole into small parts normally considered details. Then each detail may be approached as a whole. Following the breakdown, the child, rather than trying to associate different "wholes" or schemas, will instead be engaged with parts or details presented to him as a whole. Further, the precise use of verbalization will assist the child in focusing his thinking. Thought then emerges to a conscious level and is more readily translated from autistic thought to drawings. Consequently, his drawings, as representations of thought, will be a more complete symbolic representation of his experiences and his internalized schemas.

Of course, not all of the child's expressions will take place during verbalization. Many of his ideas and feelings cannot be verbalized, for they are stored as images and symbols deeply imbedded within autistic thought. Nevertheless, by freeing each child to engage in egocentric thought, it is expected that, at least to some degree, he will "evoke the feeling by which it (autistic thought) is led", assimilating and accommodating egocentrically what he feels and experiences into his own schemas. Finally, in the process, newly assimilated ideas will be expressed through his unique symbol system, drawing.

Asking precise questions is the key to opening the doors of the mind in preparation for original, spontaneous, imaginative expression through art. Although described more fully in a discussion of the experimental program beginning on page 25, following are some examples of the types of questions used in this study:

TOPIC: What animal would you be if you could be one?

(Feeling Questions)

How would it feel to be a bear?

Would you be kind and gentle or ferocious?

Would you be scared if you saw a hunter coming towards you?

(Perception Questions)

How does the skin of an elephant feel?

What color are a bird's feathers--one color or a mixture of many?

What are some sounds you have heard a large bird make?

(Concept Questions)

**If you were a horse would you be bigger than _____
(fill the blank with a child's name)?**

What kinds of things would you eat if you were a fox?

Where would you live?

Who would your friends be?

HOW WAS IT DONE?

The Pupils

The 85 subjects used in this study were 5- and 6-year-old pupils enrolled in two different schools in Alachua County, Florida. The 49 attending P. K. Yonge Laboratory School served as the experimental group. The remaining 36, attending Duval Elementary, served as a control group.

The Staff

Both experimental and control groups were provided experiences under the direction of experienced art teachers with similar professional training in elementary art education.

The Procedures

Both experimental and control groups were provided direct instruction in art once a week throughout the 1974-75 school year. The control group received what is generally recognized by art educators as a sound, discussion-based, "humanistic approach to art education". The approach is described by the control group's art teacher, Elizabeth McCown, in her rationale for the control group's art program (see appendix). The experimental subjects were treated with a relatively intense verbal experience specifically designed to encourage the child to state his egocentric thought as visual symbols.

The art experiences provided the treatment group were designed to aid students to achieve two main objectives: (a) to investigate, explore, and experience materials appropriate to their developmental level and (b) to express their needs and experiences with originality, imagination, and spontaneity through drawing, painting, clay and construction, after exploring the materials to be used in art activities.

The exploration of materials was designed to give children skills through experience: the experience of problem solving, of finding out what different materials will do. When the objective of the art activity was the exploration of materials, cognitive content or subject matter was not stressed but cognitive processing was. That is, instead of talking about what the object would be, questions were asked which focused on the "how" of doing it.

Questions were intended to allow each child to draw from his own experience in achieving a solution to the problem. Thus, the verbal interaction encouraged each child to be somewhat egocentric. The interaction also broke wholes into parts, stimulating awareness of details. For example, if the problem was paper maché, then the questioning began with the general question, "What is paper maché?" Then specifically, "What can we build to give the newspaper and paste something to stick to?" . . . "How do we get the cardboard and this little box to hold together?" Responses were totally dependent on the children's experiences. When it seemed that all of the children had an idea about where to begin and the different directions they might take, production began.

"This is how to do it" instructions were avoided, since the "how to" approach to materials or ideas does not allow use of past experience in seeking new solutions. Nor does this approach allow the young child to assimilate new information in ways that are natural for him; i. e., consistent with internalized thought processes.

Following is a list of materials explored as well as the kinds of questions asked in each case:

Crayons. --What can crayons do? What kinds of lines can they make? What happens when you use the point? . . . the side? . . . go over a bumpy surface? . . . put one color over another color? How can you use crayons so they can color in the big spaces more easily?

Markers. --What kinds of lines can markers make? Is it hard to fill in big spaces? Why? What kind of paper do you think would be better to use? Bumpy? Smooth? Do markers draw big shapes or little shapes more easily? Outside lines or inside areas?

Tempera Paint. --What kinds of lines can you make with a brush this size? What happens when one line crosses over another? Does the color change? How can you make new colors? What happens when you add white? . . . black? Is paint good for filling in large spaces on your paper? . . . painting little objects?

Chalk. --How is chalk different from crayons? . . . from paint? Is it better to use chalk to make skinny or fat lines? Is it good for making big shapes? . . . for mixing colors?

Clay. --How does the clay feel? What happens when you poke it? . . . pull it? . . . pinch it? . . . roll it into a ball? . . . flatten it out? Can you make it stand tall? . . . have holes in it?

Construction with cardboard, paper, sticks, bags, etc. --How can we get these materials to hold together? Which will stand up better? . . . bend? . . . fall down? . . . fold like a fan? . . . turn into a puppet, a house, a plane?

The second major objective of the experimental program was to stimulate children to express their needs and experiences using art materials. Drawing was chosen as the primary vehicle for expression of concepts, thus facilitating concentration on ideas and concepts rather than materials and processes. Drawing materials used at various times during the year were markers, primary crayons, flat broadline crayons, and cray-pas. The children were usually free to choose between at least two of the materials.

Whereas the cognitive processes were stressed in the materials exploration, the integration of both cognitive and affective processes were given major emphasis in the verbal interaction dealing with needs and experiences. Hence, each child was encouraged to engage in egocentric thought, calling for the expression of internalized feelings, ideas, and images of a personal nature. Keeping the children "on tract" and "to the point" was not a priority. Rather, they were encouraged to express thoughts that to "untutored" adults would likely seem unrelated but which to the child have a lot of meaning.

For further clarification examples are given which demonstrate the nature of children's egocentric thought expressed by them in recorded verbal interactions prior to art experiences. It is important to note that the questions, and other teacher in-put, were not posed with "right" answers in mind. Neither were answers expected to be consistent with the real world or logical truth since children's responses derive from their own points of view and are often contrary to adult reality. Thus, each child was left free to draw upon his own original, imaginative, spontaneous resources in expressing his own perceptions and feelings.

The first example encourages egocentric thought through fantasizing about "The Day the Dinosaur Ate the Sun".

Teacher: Let's try to picture what would happen. What did he look like? How far would he have to open his mouth?

Students: Wide - Wide - Wide!

Teacher: He'd have to have a very big mouth to eat the sun.

Student: He might have taken it in little chunks.

Student: I know something. Dragons can make popcorn out of corn on the cob because he uses his hot breath.

The child then related a story she had read about the dragon who popped corn. This reaction illustrates how juxtaposition of free association occurs. She apparently took dinosaur (big animal) which the group was imagining would eat the sun which was hot and fiery and, through free association, juxtaposed dragon (big animal) with hot fiery breath cooking something to eat (popcorn). Having made the association, the innate egocentrism required the child to verbalize. In other words, operating at the preoperational level, she was incapable of keeping a thought which entered her mind to herself (see Figure 2, page 14).

Drawing 14



Notice that in the next dialogue, one child's mind was so set on what he wanted to do (go to the library) that, at that point, he was not tuned into the discussion. The comment was completely spontaneous and as if he were talking to himself.

Teacher: What else could have happened if the dinosaur ate the sun?

Student: I want to go to the library to get a book about chemistry.

Student: When the dinosaur ate the sun, it would still be light after the dinosaur's bones came out cause then the sun could climb back up.

Indeed, who knows what associations were being made within the minds of the children during this conversation? Nevertheless, as adults, it is intriguing to seek insight into the feelings and associations by which the thoughts were led, lending some "logic" to these distortions. The thoughts were certainly egocentric, perhaps even autistic, as images were communicated from an internal source--images totally inconsistent with adult reality.

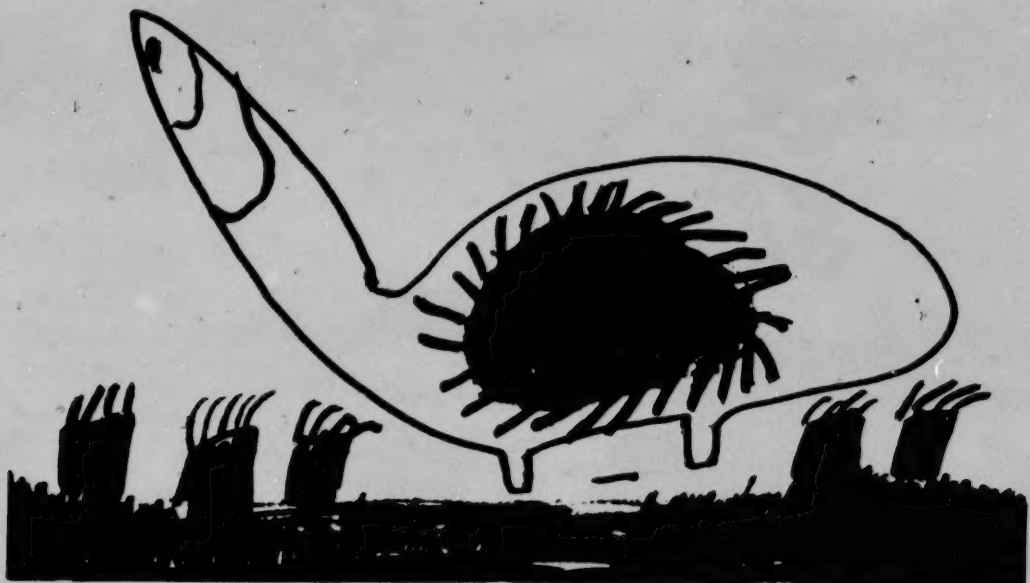
Teacher: Do you think if the dinosaur ate the sun his body would glow?

Student: No, hot air goes straight up.

Student: He would go up to heaven.

Drawing 15

MEPE DITH



On the day scheduled for art following a class trip to a circus, the topic was "What happened at the circus?" All rushed to tell about the six-year-old child performer they had seen. Although few included a child in their circus paintings, egocentric identification with the little girl equestrienne was evident in their verbal interaction.

Teacher: I didn't get to go to the circus like you did and I know that you saw a lot of neat things. I would like to hear about your favorite part of the circus.

Student: We saw a little girl named Ellie.

Teacher: Can you tell me about her?

Student: She was a little girl that worked for the circus.

Teacher: How old is she?

Student: She just turned six.

Teacher: She's only six and she worked for the circus! Is that what she does all of the time or does she go to school?

Student: No. She rides the horses. She rides them all day. Her daddy plays a trumpet, and her mother rides the horses, and her brother do, too.

Student: She feeds the horses, too.

Student: Her school is feeding the horses.

Teacher: Do you think it would be fun to be in the circus and not go to school?

Students: Yeah!!

Questions in the next sequence were directed toward building perceptions about circus animals--"What did you see?" "Where do they stay?" One of the most interesting revelations in the sequence is the joy expressed by one child using his imagination in playing with language--"elephants, helephants, jelephants".

Teacher: Did anybody see any animals?

Students Together: Tigers. Dogs.

Student: Something that drinks water and that go a long way in the mountains.

Teacher: Do you mean camels?

Student: Yeah. An something who drink water and eat peanuts. Elephants, elephants, I love elephants . . . Helephants, Jelephants.

Teacher: Where do the elephants stay ?

Student: They were in the tent. They had a chain around their foot so they wouldn't run away.

Student: One of the little elephants danced. They danced with their back legs up off the ground.

Drawing 16



The topics chosen for the drawing activities focused on children's first hand experiences or an exaggeration of experiences, as in dream and fantasy. In all cases, the emphasis was on the "self".

Some examples of topics used to stimulate expressions about first hand experiences are "About My Family", "What Happens at Night When I Go to Sleep", "The Places I Have Enjoyed Best", "Things I Like to Do at School", "How My Body Moves", and the many other experiences in which children of this age are engaged.

In the example which follows notice that children's initial responses are very general; i. e., they give their names. Questioning

begins first to call for recognition of concrete things seen in the immediate vicinity. Then, conversation broadens to perceptions of that not immediately visible and finally to that which is personal--birthdays, where each lives, and the kinds of things each likes to do with his own family.

Teacher: If I were to ask, "Who are you?" what would your answer be? (Students all called out their names.)

Teacher: What can you tell me that would help me be able to tell the difference between Brenda and Jose?

Students: We don't have the same clothes on.
We don't have the same socks.
They don't have the same shoes.
They have different families.

Teacher: Are there any other things that make people different?

Students: They have different mother and fathers.
They look different.
One has brown hair and one has blond hair.
Their eyes are different colors.
I was born on Easter. (All other children told when they were born. Then, the teacher continued to broaden discussion.)

Topics used to encourage expression of fantasy are "The Animal I would Like to Be", "Living in an Imaginary Land", "Living under Water", "If I Could Change My Size". Following is an example of verbal interaction in response to "The Day the Dinosaur Ate the Sun", illustrating children's use of their conceptual knowledge in imaginary situations.

Teacher: Now, let's pretend that the dinosaur was eating the sun, and he ate and ate and the sun went down his what?

Student: Down his throat.

Teacher: Down his throat into his what?

Students: His stomach . . . his tummy . . . etc.

Teacher: Now what is going to happen?

Student: He'll turn into a dragon.

Teacher: What will he look like with the sun in his stomach?
(Concept of effect of fire)

Student: He'd turn yellow.

Teacher: What else might he look like?

Students: He might turn red. . . . He'd turn black. . . . He'd glow. . . . He'd turn green. . . . He might turn white and glow in the dark.

Teacher: It might be very helpful for him to glow in the dark because what would happen when he ate the sun? Would it be dark?

Student: Night! It wouldn't even be in the morning.

Teacher: Right! How do you think the other dinosaurs would feel about having night time all of the time?

Student: Terrible! If there were people, they wouldn't like it either.

Teacher: If the sun didn't shine, would the trees grow?

Student: No. Plants wouldn't grow either.

Teacher: Would it be hot or cold all day?

Student: Cooooold. If he ate the clouds, maybe he would get rain in his stomach.

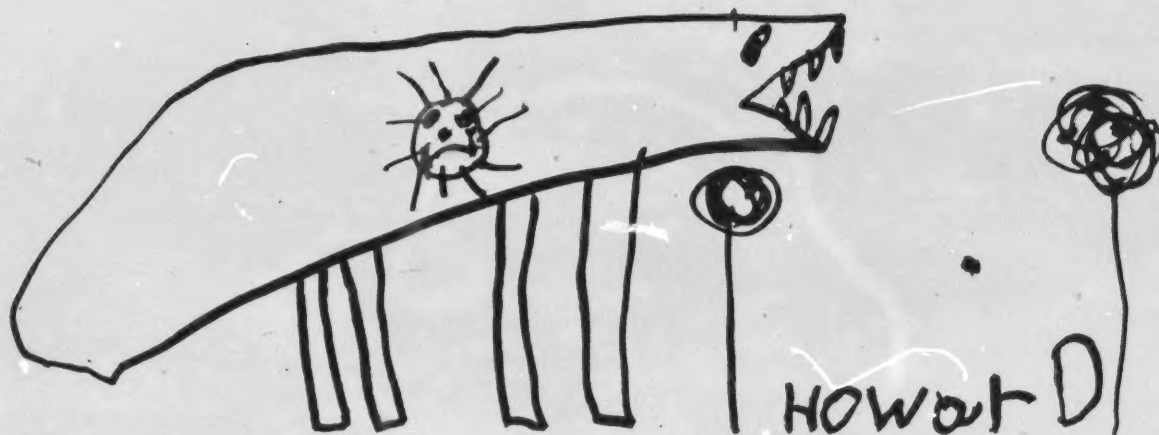
Teacher: Maybe he could use some rain to put out the sun! That would be a good ending to our story.

Drawing 17

Thelma

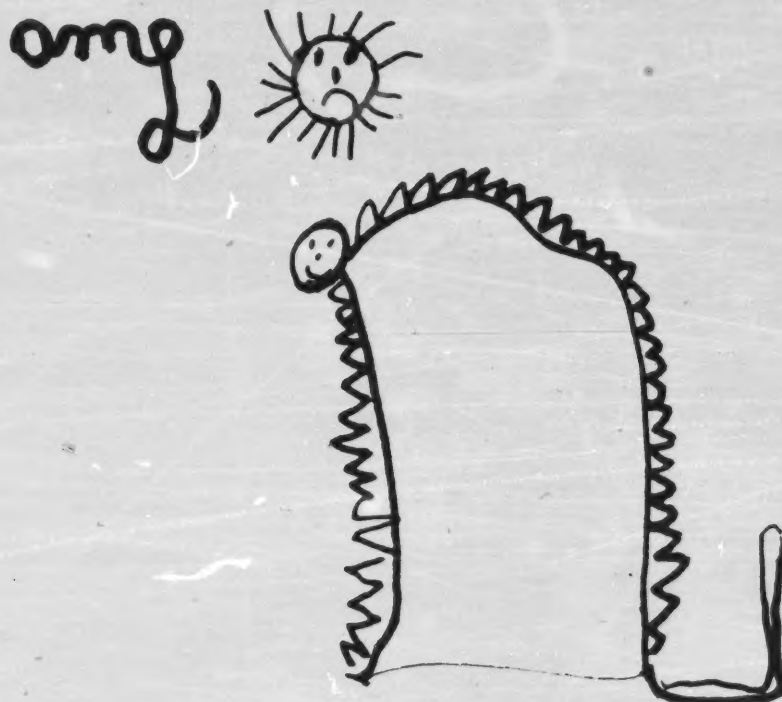


Drawing 18



Drawings 19a and 19b show the sequence of the story as imagined by the child.

Drawing 19a



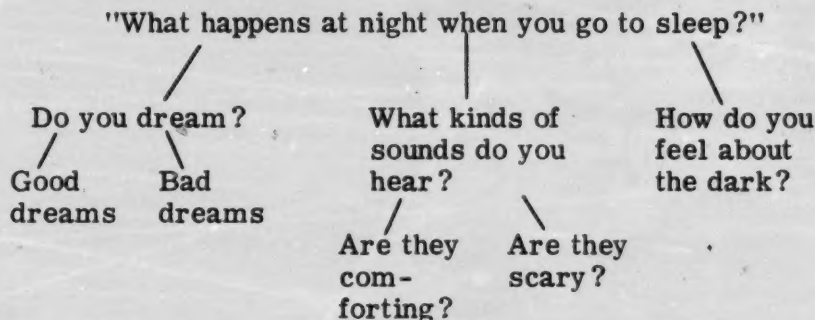
Drawing 19b



When presenting topics for children at this age level, the topic statement must be broad, since the more narrow the topic, the greater the chance that many of the children will not have had the experience. Examples follow to indicate how topics were "opened up", allowing for a wider range and variety of experiences as well as further illustrating the divergent directions conversations will take.

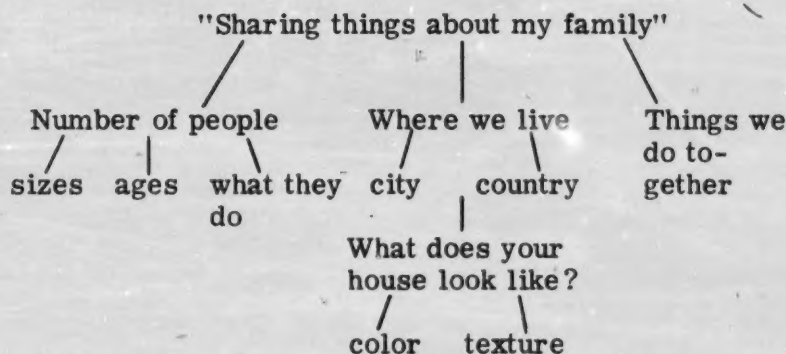
Narrow Topics

"Bad Dreams I've Had"



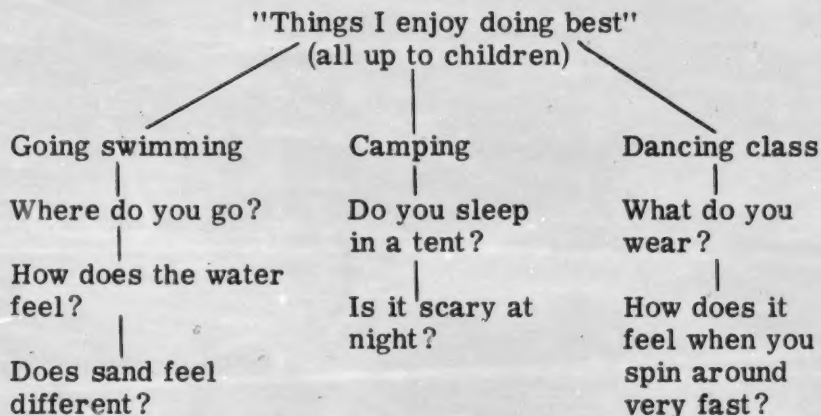
"Draw a picture of your family."

(See Drawing 20)

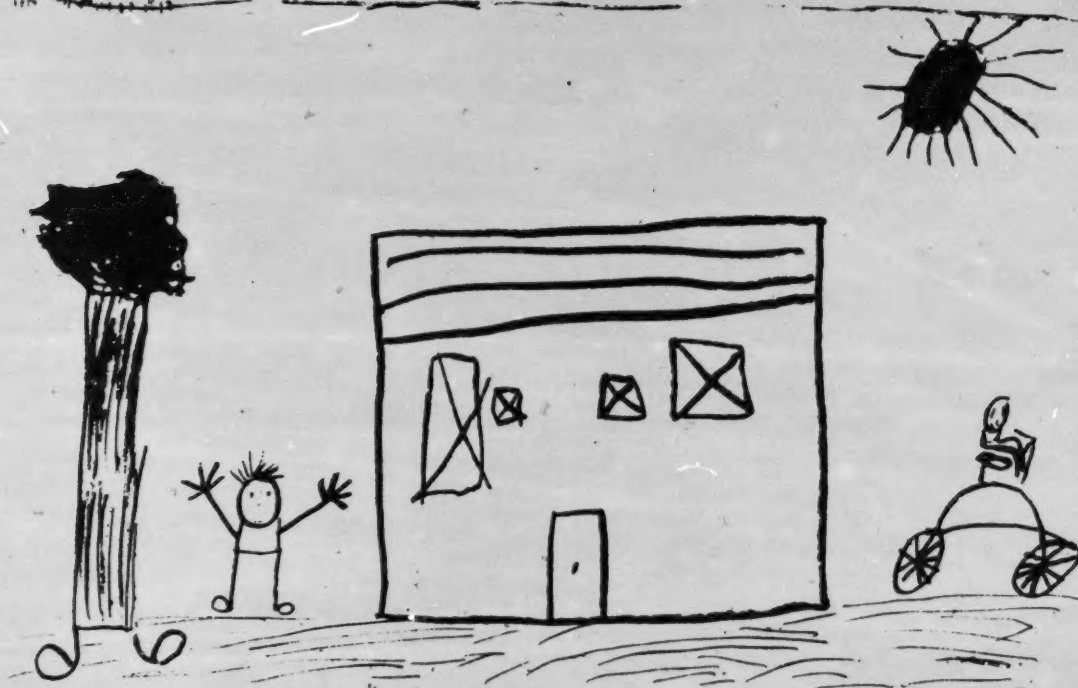


"Going Swimming"

(See Drawing 21)



Drawing 20



Drawing 21



Narrow Topics

"Playing on the
playground"

"Opened Up" Topics

"Things I like to do at School."
(examples based on children's ideas)

Play on playground

How does it feel to
hang upside down?

How does it feel to
swing back and
forth on the swing?

Music

What kinds of
sounds do you
make?

Study about
Indians

Did Indian
children live in
houses like ours?

Did their mothers
have a stove to
cook on?

"Watching a Parade"

"Being in places where there are crowds of people."

Parade

Sports
Event

Disney
World

Shopping in Stores

Questions about each place children share:

Would you like to be a small person in a crowd of large
people?

Would you fear getting lost?

Would you like to be a large, giant person in a crowd of
small people?

If you were a giant, would you be kind or mean?

"Our Class Aquarium"

"Living Under Water."

Would you live
in a house?

Who would your
friends be?

Are there plants
and trees?

What do we know
about fish? How
do they swim,
eat, etc.?

How do they grow
under water?

Sometimes a story is used as a stimulus for the art experience. To call for illustrating one which the children know limits their use of imagination. Generating a new story is more effective. Because the children have never heard the story before, free rein is given to flights of fantasy as in the example which follows of "The Day the Dinosaur Ate the Sun".

To introduce the story the teacher said, "One day a very long time ago, when dinosaurs walked the earth, there was a dinosaur who was very, very hungry. He had eaten the trees, he had eaten the plants, and there wasn't anything else to eat. He looked up into the sky, and there was only one thing left to eat--What was it?"

Students responded, "The sun!" The teacher continued to question, "What did he look like while he was eating the sun?" . . . "Where did the sun go when he ate it?" . . . "What did he look like after he ate it?" . . . "If the sun didn't shine, would it be day or night?"

In responding to such questions the child deals with some logical reality--Whatever is eaten travels down the throat into the stomach. At the same time, he may not even question whether or not the dinosaur could really eat the sun.

In summary, to open up topics effectively, questioning must arrive at a point at which each must draw upon his own imagination for responses. . . . "What did he look like while he was eating the sun?" . . . "How does sand feel?" . . . "What would it feel like to be a giant?" Expressions in art as a result of such "openings" are more original, imaginative, and spontaneous.

WHAT DO THE DATA SHOW?

Collection of Data

Two drawings were used pre and post to yield data for analysis. These were Draw-a-Person and How Are You Different? Instructions were given to all groups for pre- and posttests as follows:

Draw-a-Person. --"On this paper I want you to make a picture of a person. Make the very best picture you can. Take your time and work very carefully" (6).

How Are You Different? --"Draw a picture that shows me how you are different from everybody else and how you are special. You may want to show me your family, friends, or where you live."

To Draw-a-Person, each student was provided with a 9 x 12 sheet of newsprint paper and a number 2 pencil. For How Are You Different? each was provided with a 12 x 18 sheet of newsprint paper and 1 box of large crayons containing eight colors.

The testing procedures were designed to be as similar to a typical art experience as possible. In the experimental groups one-half of the class was tested at a time. Instructions were given to the children being tested while they were seated as a group on the rug. They then proceeded to work at tables. This is the same procedure followed for regular art activities.

The first grade class of the control group was tested in the art room as a total group, since this was their normal procedure for an art experience. The kindergarten children were tested in small groups at the "art table" in their classroom.

Preparation of Data

Slides were made of each color drawing and were organized in random order and, then, arranged in 9 sets of 20 slides each. This was to allow scoring for the number of concepts to be done in nine short periods of time with a short break between sets.

Slides used to train the raters were made by using drawings done by K-1 classes not involved in the project. Samples were taken

at the beginning and end of the year to provide the raters with images that would be similar to the actual drawings. For additional consistency, the same topic (How Are You Different?) was used for the training drawings, and the training slides were chosen to represent a wide range of developmental levels and a wide variety of concepts.

Analysis of Data

Hypothesis #1. --A child's increased involvement will be evident in drawings that are more complex than those produced when there is no verbal experience. Complexity of drawings is measured by using the Mooney-Smilansky measure which scores the number of concepts or identifiable "knowns" appearing within each drawing.

Raters were trained to score data relative to hypothesis #1 as follows:

1. Review instructions.
2. Observe and discuss slides of drawings which have been scored as examples in order to clarify the term "features".
3. Each rater scores drawings independently.
4. Together raters and trainer discuss scores.
5. Repeat above procedures until reliability is reached.

Having completed training to a reliability level, raters proceeded to score drawings according to the following procedure:

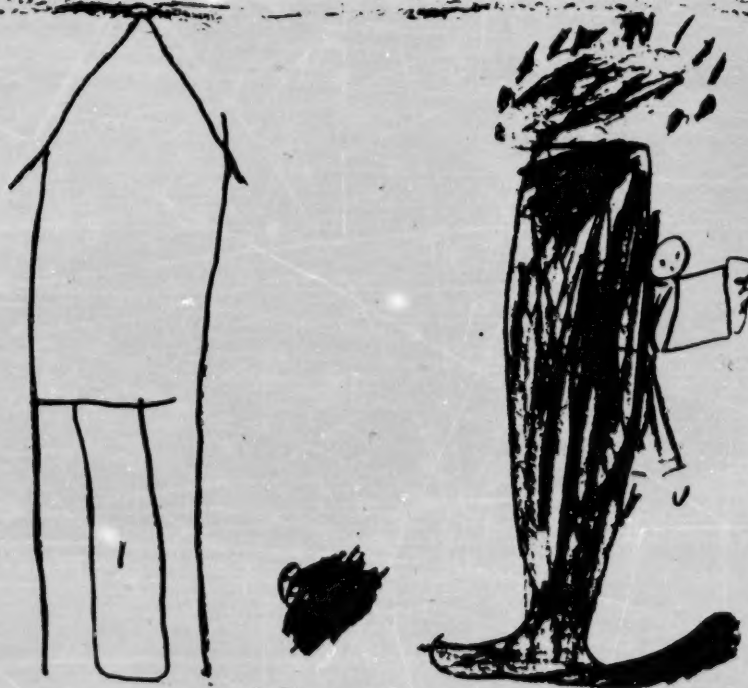
1. All raters view slides.
2. Each rater scores set of 10 training slides independently to re-check reliability.
3. Together raters and trainer discuss scores.
4. Each rater scores set of 20 slides independently.
5. Break.
6. Repeat procedures 3 and 4.
7. Repeat procedures 1-6 on three different days.

Three scores are derived from each drawing (see Sets 22 and 23). One score is derived for features within the primary figure, one for features in the background, and one which is a sum of the two. Drawings 22a (pretest) and 22b (posttest) are products of the same pupil. Scores yielded on Concept #1 (main figure) are 33 (pre) and 45 (post) and on Concept #2 (background) 17 (pre) and 25 (post). A total is indicated as Concept #3, yielding 50 (pre) and 70 (post). Pre to post increases in conceptual development are also reflected in Set 23. Concept #1 increased from 37 to 60, Concept #2 from 22 to 42, and Concept #3 from 59 to 102.

Drawing 22a

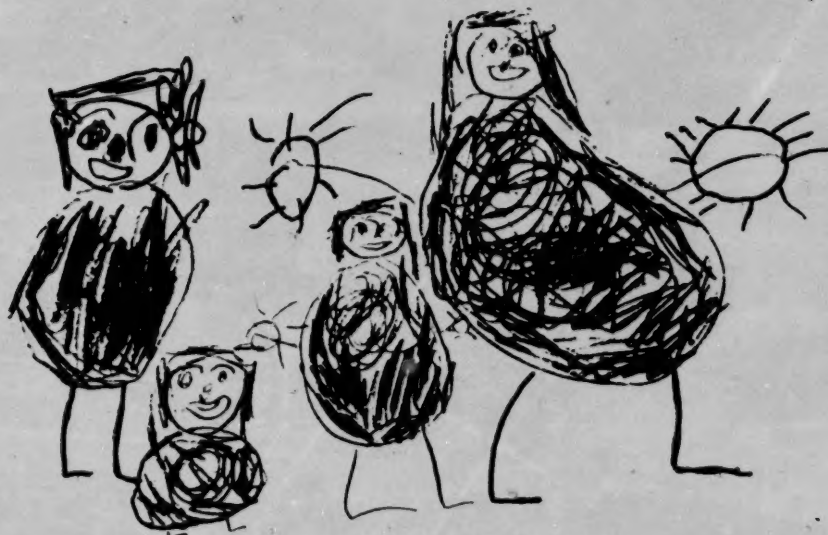


Drawing 22b



49.

Drawing 23a



Drawing 23b



Following are the instructions given raters for scoring the number of concepts in drawings.

Do not count lettering (names, words, etc.).

PERSON as main figure, give one point for each of the following concepts:

the human figure

arms, hands, fingers (one each)

legs, feet, toes (one each)

one for each of the following: neck, eyes, nose, mouth, hair, ears, hat, crown, clothing, one for obvious clothing pattern (stripes, flowers, etc.)

the figure holding an object

If the figure is standing or sitting on an object, give the object points for each concept.

Note: The main figure will be larger, have more detail, or more color. If two figures seem to be equal in size, color, or detail, they can be counted as the main concept.

HOUSE as main figure, give one point for each of the following concepts:

house texture such as wood or brick

color

windows, color in windows (one each)

door

chimney, smoke (one each)

If house shows x-ray view, give one point for each object shown in the house.

If people are shown within the walls of the house, count detail as you do for person as main figure.

BACKGROUND

If there is no background put a zero.

Give one point for each of the following concepts:

grass

sky

clouds

rain

sun, face on sun, multi-color sun (one each)

trees: add a point each for branches, leaves, roots, fruit, bird, or animal in tree

flowers; add point for unusual detail

animals; add points for features

butterflies

cars, boats, planes; add point for extra detail

rainbow

If there are no "objects" or "people" in the drawing, do not attempt to assign points for concepts. Instead, put an "S" to indicate that the child is in a scribbling stage and that the drawing is not representational.

Give 1 point for evidence of base line.

Give an extra point for unusual use of space (over-lap, double base line, perspective, etc.).

Hypothesis #2. --The verbal experience allows children to engage in egocentric thought, express their needs and experiences of themselves, assimilate ideas, and better focus their thoughts while at the same time tapping into their autistic thought process. The above procedure will become evident through drawings which are original, spontaneous, and fluid. The concepts expressed will be idiosyncratic in nature rather than stereotyped. (See Sets 24, 25, and 26.)

Originality and freedom from stereotype are determined by using a 7-step quality scale which categorizes drawings on a continuum ranging from complete lack of originality and is imitative and stereotyped to, at the high end, highly original, fluid, and spontaneous.

Raters are trained as follows:

1. Observe and discuss drawings which are representative of each step on the quality scale.
2. Each rater scores a set of drawings independently.
3. Together raters and trainer discuss scores.
4. Above procedures are repeated until reliability is reached.

Having completed training to a reliability level, raters proceed to score drawings according to the following procedures:

1. Each rater scores drawings independently and at different times.
2. Each rater uses the total set of drawings.
3. Each rater assigns drawings in 7 sets, ranging from set 7 (the most original) to set 1 (the most stereotyped).

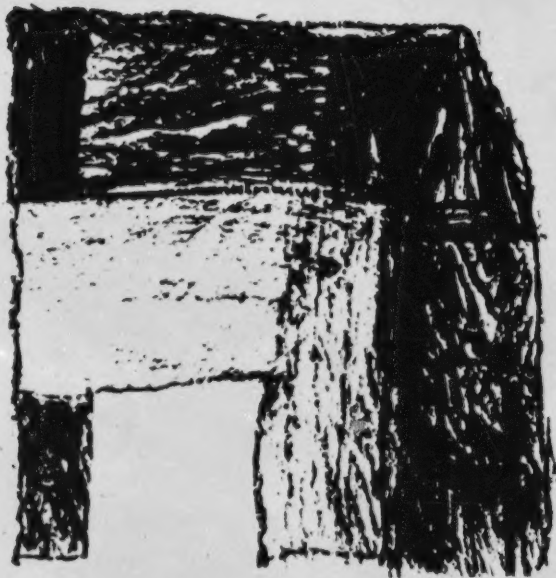
On the pages which follow are three sets of drawings presented as examples of stereotype versus originality. Set 24 is a striking demonstration of a decline in originality and increase in stereotyping which occurred in the control group. Concept #1 scores are 52 (pre) and (18 (post); Concept #2 is 37 (pre) and 7 (post); and total is 89 (pre) and 25 (post). The pretest drawing contains very personal, dream-like images. Scores exceed 35 which was considered to be the highest possible. By contrast the posttest drawing (24b) is stereotyped and uninteresting.

Drawing 24a



Drawing 24b

ERICA



Like Set 24, Set 25 also shows a decline from pre to post in originality.

Drawing 25a



(pre) C#3=26

Drawing 25b



54

(post) C#3=13

Note the consistently high scores from pre to post.

Drawing 26a



Drawing 26b



Maturity Levels

In order to obtain an indication of the maturity levels of all children involved in the project, the Draw-a-Person test was used. The scoring procedure was based on the Harris (6) 12-step quality scale, according to which each step represents one level of maturity. Maturity levels at the low end of the Harris scale were delineated further. Thus, 12 additional maturity levels that exist within 5- and 6-year-old children were identified, increasing the precision with which analysis of their art work could be accomplished.

Raters were trained as follows:

1. Observe and discuss drawings which are representative of each step on the quality scale.
2. Each rater scores a set of drawings independently.
3. Together raters and trainer discuss scores.
4. Above procedures are repeated until reliability is reached.

Having completed training to a reliability level, raters proceeded to score drawings according to the following procedure:

1. Each rater scores drawings independently and at different times.
2. Each rater uses the total set of drawings.
3. Each rater places drawings in 12 sets according to maturity level, with 12 representing the highest level.

The drawings which follow are illustrative of the range of maturity levels exhibited by the 85 children in the study. Beginning with the least mature, the illustrations are presented here to give the classroom teacher an idea about what to expect relative to the range of maturity levels as well as the progression from level to level. Such information is invaluable to the classroom teacher in planning individualized learning experiences in art as well as in other areas of the curriculum.

Maturity Level Drawings

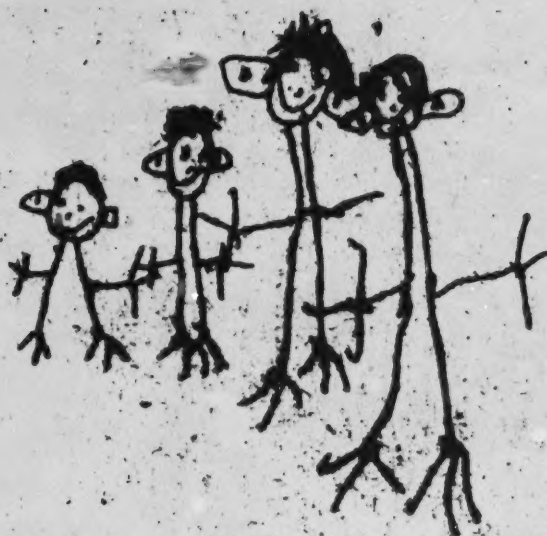
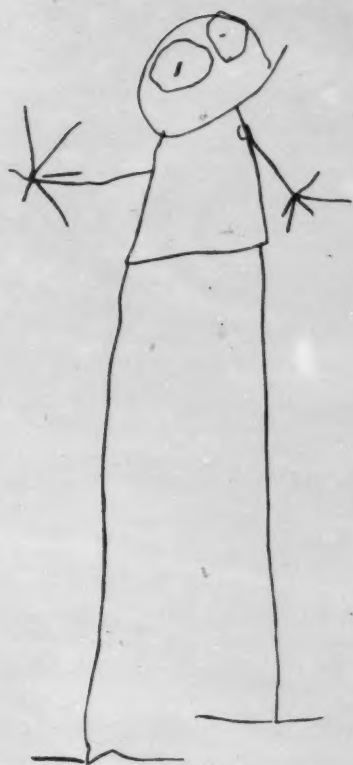


Level 1



Level 2

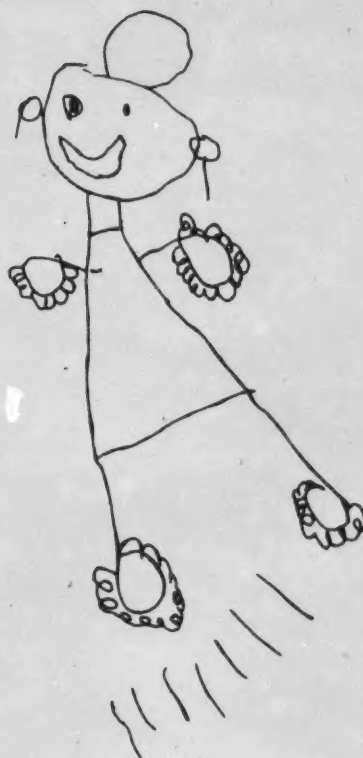
57



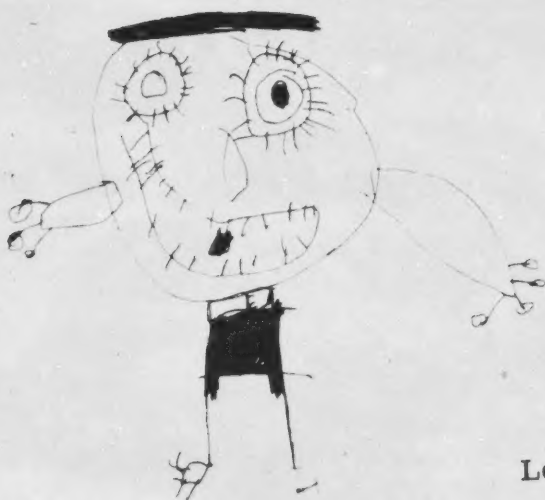
Level 3



Level 4



Level 5



Level 6

59

52



Level 7



Level 8

60

53



Level 9

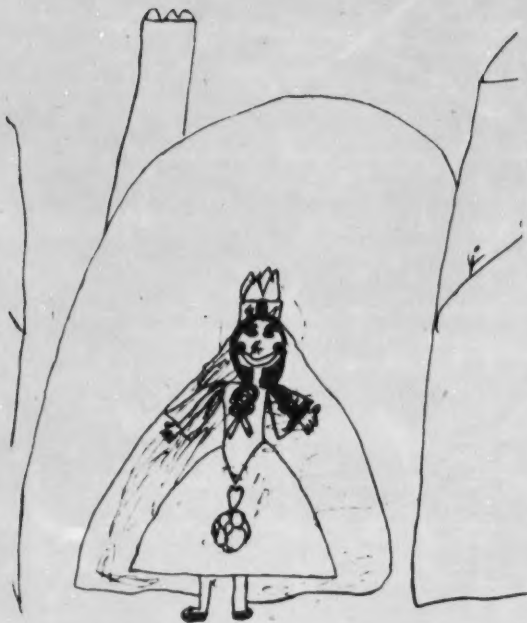


Level 10

61



Level 11



Level 12

62

The statistical analysis of data for this project involved analysis of covariance on a two-way factorial design. The two factors were treatment group (experimental or control) and grade level (kindergarten or first grade). The dependent variable (the variable to be explained) was the posttest score, and the variable serving as the covariate was the corresponding pretest score. Five dependent variables were examined: three conceptual evaluations, the Draw-a-Person test, and a stereotype test.

Results of the analysis revealed no statistical differences between treatment groups and grade levels for any of the main effects (rows, columns, or cells) for each of the five variables (see Table 1). A significant interaction was found between grade and treatment groups on the stereotype test. This means that a student's post score on the stereotype test depended upon the grade and treatment group of which he was a member. Each grade level and treatment group had a positive change from pre- to posttesting except for the first graders in the control group.

The inclusion of the covariate was found to be significant for each dependent variable. This indicates that it was appropriate statistically to adjust the post scores considering the pre scores. If this had not been done, differences among the groups found at post-testing would not reflect the fact that the groups had different starting points and, in fact, had changed their scores by the same amount at the time of posttesting.

When the treatment groups were viewed separately, several differences emerged. The experimental group had significantly different ($p = .05$) scores at the two testing points on the Draw-a-Person test ($t = 4.09$, $df = 46$) and the stereotype test ($t = 2.30$, $df = 48$). The control group had like results on the Draw-a-Person test ($t = 4.12$, $df = 33$).

The above analyses revealed that, in general, the treatment groups in the study did not change in their concept evaluations either when viewed together or individually. Further analyzing the concept evaluations, Pearson product-moment correlations were used. Statistics are provided in Table 2. Correlations of the combined groups resulted in a high correlation of Concept #1 pretest with Concept #3 pretest ($r = .67$ at $p = .001$) and with Concept #3 posttest ($r = .2403$ at $p = .016$). A low correlation was found for Concept #1 pretest with Concept #2 pretest ($r = .0016$ at $p = .494$) and with Concept #2 posttest ($r = .0958$ at $p = .199$). On the other hand, there was a high correlation between Concept #1 posttest and Concept #2 posttest ($r = .36$ at $P = .001$). This seemed to indicate that during the passage of time, the students increased their ability to achieve more of a balance in their drawings between concepts in the background (#2) and the concepts in the main figure (#1).

TABLE 1. --Analysis of Covariance Results for the Three Evaluation Concepts, The Draw-A-Person Test, and the Stereotype Test.

Source	Concept #1		Concept #2		Concept #3		Draw A-Person		Stereotype	
	df	F	df	F	df	F	df	F	df	F
Covariate	1, 76	6.90*	1, 71	7.16*	1, 72	10.85*	1, 76	43.34*	1, 80	4.15*
Main Effects	2, 76	0.44	2, 71	0.77	2, 72	0.55	2, 76	0.99	2, 80	0.43
Grade	1, 76	0.86	1, 71	1.11	1, 72	0.81	1, 76	1.37	1, 80	0.52
Treatment Group	1, 76	0.09	1, 71	0.68	1, 72	0.38	1, 76	0.28	1, 80	0.43
Interaction	1, 76	0.29	1, 71	1.05	1, 72	0.10	1, 76	0.18	1, 80	6.07*

*p = .05

TABLE 2. --Correlation Matrix of Pre- and Posttesting on the Three Evaluation Concepts, the Draw-A-Person Test, and the Stereotype Test for Both Treatment Groups Combined.

	Pretest					Posttest				
	Concept #1	Concept #2	Concept #3	Draw A-Persn	Stereo	Concept #1	Concept #2	Concept #3	Draw A-Persn	Stereo
Concept #1	1.00	0.00	0.67	0.34	0.48	0.29	0.10	0.24	0.29	0.20
Concept #2		1.00	0.76	0.33	0.43	0.14	0.30	0.26	0.32	0.19
Pretest: Concept #3			1.00	0.51	0.64	0.29	0.29	0.36	0.45	0.24
Draw-A-Person Stereo				1.00	0.34	0.30	0.29	0.36	0.60	0.19
					1.00	0.25	0.15	0.25	0.33	0.21
Concept #1						1.00	0.36	0.83	0.58	0.64
Concept #2							1.00	0.82	0.47	0.49
Posttest: Concept #3								1.00	0.63	0.68
Draw-A-Person Stereo									1.00	0.43
										1.00

When looking at the mean scores for all grades in Table 3, it becomes evident that the Concept #2 scores improved equally for both treatment groups, whereas the Concept #1 scores improved for the first grade students in the experimental group only. It can also be noted that the mean scores for Concept #1 were higher than the mean score for Concept #2. This seems to support Piaget's theory that children at this age perceive their experience of the world by means of general schemas, which represent the whole, paying less attention to detail on background information. For example, the child will pay more attention to the drawing of himself, making sure that he has included features, clothing, et cetera, and will include only a simple tree and the sky to make up the background.

Viewing all grades combined on Concept #3, both the experimental and control groups exhibited positive mean changes from pre- to posttesting. The experimental group, though, had a lower pretest mean but a higher posttest mean than the control group.

When breaking down the groups by grade level, some additional information becomes clear. Further, while there was little or no difference between Concept #1 pre- and posttest scores for kindergarten children in the treatment group and first graders in the control group, considerable gains were made by the first graders in the experimental group. At the same time that these first graders made gains in the number of concepts scored in their main figures, the mean score for background went down very slightly. As a group, the experimental first graders seemed satisfied with the amount of background information they were providing. They were the only group whose pretest scores were very close for Concept #1 and Concept #2. They seemed to put their efforts into improving the main object.

While the kindergarten scores remained stable on pretest and posttest for Concept #1, there was considerable increase in the mean score for the experimental group on Concept #2. This increase seems to indicate a greater awareness of the child's environment, and awareness of the world that goes beyond the egocentric concern for the self only.

The mean scores on Concept #3, when observed by grade, showed the experimental group to have performed, apparently, better than the control group. While the pretest means for the experimental group were either less than or equal to the pretest means for the control group, the posttest means for the experimental group were not only in a positive direction for both grades investigated, but also larger than the posttest means for the control group for kindergarten and first grade.

The Draw-a-Person test and stereotype test were also investigated further. Both tests at both administrations were found to correlate highly with each other and with the three concept evaluations (see Table 2). Only one correlation did not show a significant relationship. This was the pre-stereotype test and the posttest on Concept #2 ($r = .1518$ at $p = .085$). Of the three concept evaluations, both the Draw-a-Person test and the stereotype test correlated highly with Concept #3 in all instances.

The mean scores (see Table 3) for treatment groups for each individual grade and for combined grades increased from pre- to posttest on both the stereotype test and the Draw-a-Person test. The one exception was for the control first graders on the stereotype test. The pretest score was 25.0 whereas the posttest score decreased to 20.2.

APPENDIX

THE HUMANISTIC APPROACH TO ART EDUCATION IN THE ELEMENTARY SCHOOL

by

Elizabeth McCown*

There are currently many approaches to teaching art in the elementary school. Among these is the media-oriented approach, consisting of units in the various media, such as paint, crayon, chalk, clay, etc. There is the concept-oriented approach, consisting of units in line, shape, texture, color theory, and the other basic art elements. The last, and least prevalent, is the student-oriented approach. The application of humanistic psychology to art teaching in the elementary school is the method that is to be explained in this manual.

After explaining briefly what my ideas on the humanistic art program are and why I believe it to be vital to the artistic and psychological growth of the child I shall introduce an art lesson which seems to embody the spirit of the program.

The humanistic art teacher seeks to draw upon the inner resources of the student for the art program. The program is designed to stimulate the student to delve within himself. The source of the art experience comes from within the student as a result of the teacher's motivation, rather than imposing upon the student concepts and activities that are foreign to his reality. Virtually all of the student's education originates outside of the student and is assimilated into the student.

The humanistic art teacher seeks to put the student in touch with his own reality, whatever that may be. By stressing the great importance of his own experiences, imagination and viewpoints, art plays an important part in personality development. Success in art depends not

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on a student's ability to assimilate and perform certain art functions but on the degree to which he allows himself to experience and express his own life.

How does one go about performing this enormous task? Quite simply, one aims at the student in the instruction. The student is the subject of the instruction, not the object. Not depending on the media, the humanistic art program could feasibly consist of merely paper and crayons. The teacher asks questions and directs discussions that lead the student to examine himself. For instance, the students may be called upon to answer and portray such things as their most cherished possession, their concept of the ideal vacation, their favorite meal, their dream home, what they always aspired to be in a circus, etc. The list is as endless as is the teacher's creativity and the student's imagination. The student is able to look at his art product as a rightful extension of himself, thus fostering a sense of pride and value towards the art product and the student himself.

Art education taught in this way would lead not to a "few" gifted artists but hopefully a generation of aesthetically sensitive people.

In the course of the humanistic art program the student may be exposed to a variety of media but the media itself is of secondary importance. By way of discovery and sensitivity through experimentation the student will also learn the basic concepts of art.

What is meant by "getting the student in touch with himself"? This concept is best illustrated by the following unit which was presented to a third grade class.

The instructor leads a discussion on the differences that exist between the students. It begins by noting the more obvious exterior differences and moves inward to the vast network of likes, dislikes, opinions, activities, backgrounds, that go towards making the student a unique individual. These differences are discussed from a favorable viewpoint in that they add diversity and excitement to life. The students are told that they are going to do portraits which are called "I am different." The students next choose the background color. This is not necessarily their favorite color but the one that best suits their personality. While lying down on the paper, their outline is drawn. They cut out their flattened image. The instructor displayed these images hand in hand, along the hallway outside the art room. The students proceeded to fill themselves with their own uniqueness, first using crayons, then cut outs from magazines, then paints. Because of the nature of the assignment a sense of oneness was fostered between the student and his

art. This is not always obvious to the viewer of the product but is revealed best by the artist himself. Thus a humanistic art program is usually accompanied by a story.

The success or failure of any theory is always dependent upon its practical application. The remainder of this manual is made up of lessons which have been successfully implemented during the 1973-1974 school year at Duval Elementary School. These are in no way to be taken as complete curriculum but merely as a source of inspiration and motivation to the prospective humanistic art teacher in the elementary school.

HUMANISTIC MOTIVATIONS

Due to the fact that the Humanistic Art Education curriculum is based primarily on two factors, student creativity and teacher stimulation, the program ideally could be conducted with a basic media of crayon and paper or some variety of the two. The following are stimulations to be presented by the instructor and adapted to the particular media being used by the class.

STIMULATION: The instructor asks the students to turn and to consider as closely as possible the person sitting next to them. They are to study every detail of them. Look for characteristics that you have never seen before. Notice the unique details of the face and also the similarities. This person will be doing the same thing with you. After doing this silently for as long as the student's attention span permits, provide them with the media with which they will do their study.

STIMULATION: The instructor tells the class that they are going to make up and draw a story from the words which she calls out. You begin the story-picture with two absurd word combinations--say elephant and inner tube. The class then portrays any composition of the two that they wish. An additional image is called out and added to the story-picture; for instance, bird's nest, then alarm clock, then shoe string, then a monkey, then a bath tub, then a t-shirt, etc. This is not only an enjoyable activity for all but it serves as a stimulus for the student's imagination and exercises his ability to portray that imagination in a visual form. Certain students may be called upon when finished to show their pictures and relate the story that corresponds to it.

STIMULATION: The student is asked to concentrate on his own bedroom and to render it and each visible thing in it to the utmost detail (textures, etc.).

STIMULATION: The student is asked to concentrate and portray their most treasured possession and to render it in utmost detail showing the surroundings, environment or context.

STIMULATION: The student is asked to picture themselves at the bottom of the deepest part of the sea and portray what they see there.

STIMULATION: The only stimulation that the students are given are the words, "Where do the monsters live?"

STIMULATION: The instructor leads a discussion of the ideal place to live. This dwelling-place doesn't have to be a house but could be a candy store, an igloo, a fairy castle, a houseboat, a sailboat, a cloud, a spaceship, a church, a submarine, a treehouse, a tent in the woods, a cave, etc.

STIMULATION: The instructor leads a discussion on the perfect day at the beach and what it consists of. The student himself must be in the picture engaging in some one or several activities such as, swimming, sunning, fishing, playing volleyball, collecting shells, etc.

SELF PORTRAIT (FRAMED)

MATERIALS: Tongue depressors or popsickle sticks, 5 by 5 light colored construction paper, glue and crayons.

PROCEDURE: The instructor leads the class in a discussion of the outward appearance and characteristics of the individuals in the class. The students then chose a color that best suits their personality. The students do self portraits, torso and head. The portrait is framed with a simple frame prepared beforehand by overlapping the ends of the sticks and gluing together. When portrait and frame are finished the students put glue on the edges of their portraits and lay the frame on top of the paper. This lesson may be varied in subject and a picture of the students' homes are effective. This lesson seems to inspire a large degree of pride in the student.

MAGIC PAPER ACTIVITIES

MATERIALS: Crayons, paper, india ink or black tempera paint, and paint brushes.

PROCEDURE: The instructor leads a discussion with the class about a person or animal in the student's life that is of more importance to them than themselves. The students talk about the reasons that they

love them so much and the good feeling that comes from caring that much for another. With crayons the students are to portray that person somewhere, alone, on a page of paper. The students are told that a fierce, black storm is on its way (the india ink or tempera paint) and unless they press really hard in this picture, their individual will be lost in the storm. Conversely, if they love them enough the storm will bead and roll right off of them like magic. After the picture is finished a black wash is applied lightly with a brush.

STIMULATION: The students are told to make a wish for anything at all and to put it down on this "magic" paper and it will come true. The students wish for such things as baby brothers, toys, candy, new houses, a day at the beach, etc. This lesson is more suitable for Kindergarten and first grades.

IMAGINATIVE TOWN

MATERIALS: Large covered bulletin board, colored construction paper, crayons, scissors and paste.

PROCEDURE: The instructor leads a discussion with the class on the many components of a town or city. She then leads a discussion on all of the "ideal" components of a dream city. Using colored construction paper some of the students draw and cut out those things which they would include in "their" city or town, others work directly onto the bulletin board, filling the details such as the grass, etc., while others construct the buildings. The success or failure of this activity rests in the teacher's ability to involve the students to the degree that they actually feel like they are each taking an active part in the planning and assembling of their "dream" town. You may even want to name the town after the teacher of the particular class or after one of the students, such as Parkerville or Jonestowne.

TREASURE HUNT

MATERIALS: Rolls of colored paper, crayons.

PROCEDURE: The instructor leads a class discussion on "treasures", beginning with the obvious treasures, gold and silver and working the way to the reality of the students. The students' treasure reality may run to banana splits ten feet long, motorcycles, animals, money, clothes, etc. They are then told that each table is a treasure island and after burying or hiding their individual treasures they are to draw and plan a treasure map, complete with booby traps, etc. Dotted lines may be used to plot the path of the wild goose chase to the hidden treasure.

MUSICAL CRAYONS

MATERIALS: Rolls of colored paper, crayons, record player, contemporary (to the student) records.

PROCEDURE: The students are given only one crayon and asked to close their eyes and listen to the music. They are to listen to the beat, to the rhythm and allow them to move their hands, in much the same way they allow them to move their feet when they dance. When the song is over they are permitted to open their eyes and look at the "music" on their paper, trade crayons and begin again on top of the previously drawn lines. This is a great kind of release for hyperactive classes. It also helps the students to link the art and music together. Some students may want to stand up while they listen and draw in order to move their feet to the songs.

REFERENCES

1. W. Lambert Brittain, "Some Exploratory Studies of the Art of Preschool Children," Studies in Art Education, Vol. 10, No. 3, Spring, 1969, pp. 14-24.
2. Don Dinkmeyer, "The C-Group: Focus on Self as Instrument," Phi Delta Kappan, June 1971, p. 619
3. Elliot Eisner, "Curriculum Making for the Wee Folk: Stanford University Kellering Project," Studies in Art Education, Vol. 9, No. 3, Spring, 1968, pp. 45-56.
4. Don Fabun et al., Teaching Strategies to Develop Children's Creative Thinking, Instructional Teacher Training Package. El Cajon, California: Cajon Valley Union School District, 1971, p. 2.
5. Pearl Greenberg (Task Force Chm.), Art Education: Elementary. Washington, D. C.: The National Art Education Association, 1972.
6. Dale Harris, Children's Drawings as Measures of Intellectual Maturity. New York: Harcourt, Brace and World, Inc., 1963.
7. Viktor Lowenfeld and W. Lambert Brittain, Creative and Mental Growth. New York: The Macmillan Company, 1965.
8. A. H. Maslow, The Farther Reaches of Human Nature. New York: The Viking Press, 1971, pp. 57-58.
9. Harold J. McWhinnie, "Viktor Lowenfeld: Art Education for the 1970's," Studies in Art Education, Vol. 14, Fall, 1972, pp. 8-14.
10. Jean Piaget, "Art Education and Child Psychology," in Education and Art, ed. Edwin Ziegfeld, Paris UNESCO, 1953.
11. Jean Piaget, The Language and Thought of the Child. New York: World Publishing, 1955.
12. Jean Piaget, The Psychology of the Child. New York: Basic Books, Inc., 1969.

13. Fred R. Schwartz, "Piagetianism and the Insights and Illusions of Art Education," Art Education, Journal of the National Art Education Association, Vol. 26, No. 5, May 1973, pp. 6-9.
14. Brent G. Wilson, "A Proposal for Systematic Curriculum Evaluation in Art Education," Studies in Art Education, Vol. 9, No. 3, Spring, 1968, p. 57.

BIBLIOGRAPHY

- Mary Jane Anway and Theodore Macdonald, Research in Art Education: The Development of Perception in Art Production of Kindergarten Students. Final Report. Grand Rapids Public Schools, Mich., May 1971. (ERIC No. ED 054 187)
- John Buck, "The H-T-P Technique," Journal of Clinical Psychology, Vol. 4, October 1948, pp. 319-326.
- Florence Goodenough, Measurement of Intelligence by Drawings. New York: Harcourt, Brace and World, Inc., 1926.
- Marvin Grossman, "Perceptual Style, Creativity, and Various Drawing Abilities," Studies in Art Education, Vol. 10-11, Winter, 1970, pp. 51-53.
- Isaac Jolles, "A Study of the Validity of Some Hypotheses for the Qualitative Interpretation of the H-T-P for Children of Elementary School Age: I Sexual Identification," Journal of Clinical Psychology, Vol. 8, 1952, pp. 113-124.
- Gordon L. Kensler, "The Effects of Perceptual Training and Modes of Perceiving Upon Individual Differences in Ability to Learn Perspective Drawing," Studies in Art Education, Vol. 6-7, Autumn, 1965.
- Betty Lark-Horovitz and James Norton, "Children's Art Abilities: Developmental Trends of Art Characteristics," Child Development, Vol. 30, 1959, pp. 433-452.
- Hilda Present Lewis, "Developmental Stages in Children's Representation of Spatial Relations in Drawings," Studies in Art Education, Vol. 3, Spring, 1962, pp. 69-76.
- Hilda Present Lewis and Paul E. Mussen, "The Development of an Instrument for Evaluating Children's Artistic Creativity," Studies in Art Education, Vol. 10-11, Spring 1969, pp. 25-48.
- Jessie J. Lovano, "The Relation of Conceptual Styles and Mode of Perception to Graphic Expression," Studies in Art Education, Vol. 10-11, Spring, 1970, pp. 39-49.

Ross L. Mooney and Sara Smilansky, An Experiment in the Use of Drawing to Promote Cognitive Development in Disadvantaged Pre-School Children in Israel and the United States. Final Report. Ohio State University, Columbus, Ohio, Research Foundation, September 30, 1973. (ERIC No. ED 082 842)

Paul Mussen and Hilda Lewis, Criteria for Evaluation of Children's Artistic Creativity. Final Report. California University, Berkeley, February 1967. (ERIC No. 016 239)

Ronald W. Neperud, "An Experimental Study of Visual Elements, Selected Art Instruction Methods, and Drawing Development at the Fifth-Grade Level," Studies in Art Education, Vol. 6-7, Spring, 1966, pp. 3-9.

Mary J. Rouse, Development and Validation of Descriptive Scale for Measurement of Art Products. Bloomington, Indiana, 1965. (ERIC No. ED 003 078)

Norma Trowbridge, "Creativity in Children in the Field of Art: Criterion Development Study," Studies in Art Education, Vol. 8-9, Autumn, 1967, pp. 2-13.

H. A. Witkin, Psychological Differentiation. New York: John Wiley and Sons, Inc., 1962.